



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/849,225 | 05/20/2004 | Yosuke Kato | 500.43858X00 | 6824 |

20457 7590 10/16/2007
ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

| |
|----------|
| EXAMINER |
|----------|

ABDULSELAM, ABBAS I

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2629

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/849,225

Applicant(s)

KATO ET AL.

Examiner

Abbas I. Abdulsalam

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/11/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,5-12 and 16 is/are allowed.
- 6) ☒ Claim(s) 2,4,13-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to a communication filed on September 11, 2007. Claims 1-17 are pending.

Response to Arguments

2. Applicant's arguments filed on September 11, 2007 have been fully considered but they are not persuasive.

Applicant argues that the cited references Bi et al (USPN 7113173) and Geoghegan (USPN 7165054) alone or in combination do not teach reading information on a slip sheet by means of an electronic pen device arranged to read information indicated by dot-patterns on the sheet. However, as shown in the art rejection below, Bi teaches a pen controller 110A and a digitizer panel 110B, such that the pen controller 110A controls the digitizer panel 110B and provides positional information of pen or stylus contact such that the positional information of pen is included in "pen event". In addition, Bi teaches input activities are detected alternatively by the pen controller 110A, or by keyboard controller 125 (col. 8, lines 65-67) such that the keyboard controller 125 also supports a PS/2-type bar code reader (col. 26, lines 50-53), Note that it is obvious that a bar code reader does read information from printed paper. Applicant also argues that the references cited do not teach a claim limitation which states "...to be able to specify kind thereof together with kind information of said document..". However as shown in the art rejection below, Bi teaches the pen controller 110A controls the digitizer panel 110B and provides positional information of pen or stylus contact such that the positional information of pen is included in "pen event". Note that positional information with respect to the digitizer

Art Unit: 2629

panel has to have specific information with respect to the panel as well. In addition, when a bar code reader is used, reading a bar code is functionally equivalent to specifying a material over which the code is printed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bi et al (USPN 7113173) in view of Geoghegan (USPN 7165054).

Regarding claim 2, Bi et al (*hereinafter*, "*Bi*") teach a document taking-over system ((*Fig. 2 (100, 101, 108, 109, 114)*) including an electronic pen terminal device (*col. 5, lines 46-47, Fig. 1 (100)*), a wireless interface device (*Fig. 1(100)*) provided with an electronic pen (*col. 6, lines 40-41, Fig. 1 (110)*), a pen-based input subsystem (*STYLUS 110*) which gets information written by hand on a document prepared to be able to specify a kind thereof together with kind information of said document as electronic data (*col. 7, lines 37-40, col. 12, lines 20-23, col. 12, lines 24-25, the stylus input subsystem 110 is implemented by a stylus, a pen controller*

Art Unit: 2629

110A and a digitizer panel 110B, the pen controller 110A controls the digitizer panel 110B and provides positional information of pen or stylus contact such that the positional information of pen is included in "pen event", which is to be transmitted over wireless link as shown in Fig. 7 [note that the transmission of "pen event" in the network is transmission of electronic data], col. 79, lines 29-33, and as shown in Fig. 110, a local handwriting recognition system which includes determining whether the system is in a handwriting recognition mode, if so, the system calls the handwriting recognizer in step 2328 [note that prior to performing handwriting recognition, the system has to encounter or specify a document from which hand writing recognition is to be performed]) and for transmitting said electronic data (col. 11, lines 53-54, the positions of the stylus in stylus input subsystem 110 are delivered to the host computer 101), a document taking-over apparatus (Fig. 2 (101) for processing said electronic data to produce it as document information (col. 11, lines 52-54, after receiving positions of the stylus in stylus input subsystem 110, the host computer 101, generates display commands, note that it is apparent that the host computer has to process the received position data before generating display commands) and a system (Fig. 2(108)) disposed at a latter stage to utilize said document information, which are connected to one another through a network (col. 6, lines 5-7, FIG. 2 illustrates a communication between the wireless interface device 100 and a wired LAN

114, which includes a server 108, note that due to network connection, the server (108) in the network 114 can be used after the host computer (101) processes the received data from the interface device (100)); said electronic pen terminal device is adapted to interface with document identifying indicia of said document, said document identifying indicia dictating data entry layout areas of said document, where said information is written (col. 26, lines 50-53, input activities are detected alternatively by the pen controller 110A, or by keyboard controller 125, col. 8, lines 65-67, such that the keyboard controller 125 also supports a PS/2-type bar code reader, note that positional information with respect to the digitizer panel has to have specific information with respect to the panel as well. In addition, when a bar code reader is used, reading a bar code is functionally equivalent to specifying a material over which the code is printed) said document taking-over apparatus (Fig. 1(101)) comprising: communication means (Fig. 1 (115), Fig. 2 (114)) for receiving said electronic data including said information written to said data entry layout areas from said electronic pen terminal device (Fig. 1 (100), note that as mentioned above, alternate input activities include keyboard controller (125) with a bar code reader) through said network (Fig. 2 (114)) and transmitting said document information to said system at the latter stage (Fig. 2 (108)) (col. 11, lines 49-54, the host computer 101 receives position of the stylus from the wire less interface device (100), col. 5, lines 55-57, as shown in Fig. 1, the remote host computer 101 is provided with a

Art Unit: 2629

transceiver 115 for communication with a transceiver 116 in the wireless interface device 100, as shown in Fig. 2, the transceiver 116 in the wireless interface device 100 communicates with an access point 109 by way of a transceiver (not shown), which interfaces the wireless interface device 100 with a wired LAN 114 which includes a server 108, note that elements (100, 101) are the same for both Fig. 1 and Fig. 2); memory means (wired and wireless LAN card, See Fig. 44 (1354)) for storing format information which defines specifications for converting said electronic data into a predetermined format (col. 47, lines 52-56, as shown in Fig. 46, communication with a host computer (101) runs a wired LAN card 1352 and a wireless LAN card such that formatting is to be done by IPXODI.COM (1364), note that prior to formatting from one version to another, there has to be specifications and other necessary information allowing one format to be converted into another format) utilizable in said system at the latter stage (FIG. 2 illustrates the communication between the wireless interface device 100 and a wired LAN 114, which includes a server 108);

Bi teaches as shown in Fig. 1, the remote host computer 101 is provided with a transceiver 115 for communication with a transceiver 116 in the wireless interface device 100 (col. 5, lines 55-57), note that for the remote host computer 101 to receive the data from the wireless interface (100), there has to be compatibility in formats of the two systems (100,

101) and compatibility in format is achieved by an appropriate conversion of one format into another. Bi teaches as shown in Fig. 46, software structure of network system which enables the wireless interface device including a host computer (101) as shown in Fig. 46 in which communication from the host computer (101) to both the wired LAN card (1352) and the wireless LAN card is formatted by the IPXODI.COM (1355) and multiplexed to either the wireless LAN card 1360 or wired LAN card 1352 by the multiplexer IPXMUX.COM (1364).

Bi does not specifically teach preparation means for preparing said document information of said predetermined format on the basis of said electronic data and said format information, and registration means for registering the document information in the memory means and transmitting said document information to said system at the latter stage by means of said communication means

Geoghegan on the other hand illustrates a computer (12), with a conversion system (36) shown in Fig. 1, a knowledge object (40), which is any electronic representation of information (such as an electronic file that storing a word processing document, a web page, a spreadsheet, a presentation, an e-mail, a chart, an image, an audio file, a video, etc.) as shown in Fig. 2 (col. 6, lines 14-18), custom system 32 which includes the

conversion system 36 to receive the knowledge object 40 and convert the knowledge object 40 into a set of knowledge atoms 44, each knowledge atom 44 representing an elementary piece of information that was contained in knowledge object 40.(col. 6, lines 19-23), and then the knowledge atoms 44 that represent a knowledge object 40 are stored in a tree structure. For example, custom system 32 can convert each knowledge object 40 into a tree structure stored in extensible markup language (XML)(see fig. 4 (S1, S2col. 6, lines 38-44). Geoghegan teaches the custom system 32 accepts one or more knowledge objects 40 and produces one or more custom learning objects 42, such that learning objects 42 can be addressed to a user (26) who can communicate in a network (col. 4, lines 65-67col. col. 5, lines 1-13, 6, lines 7-10, col. 9, lines 33-35).

*It would have been obvious to one of ordinary skill in the art the time the invention was made to combine Bi's network-based remote host computer (101) shown in Fig. 2 with Geoghegan's conversion system 36 inside a computer (12) **as shown in Fig. 1 (the conversion system receiving electronic information, processing it and storing it in XML format, and the computer producing (42) to a user (26) in a network)**, because the use of a conversion system (36) inside a computer*

(12) allows translation of electronic document into custom learning objects enabling training that can be provided over a computer network as taught by Geoghegan (col. 1, lines 17-21).

Regarding claims 13 and 15, Bi teaches a document taking-over method ((*Fig. 2 (100, 101, 108, 109, 114)*)) of getting information written by hand on a document prepared to be able to specify a kind thereof together with kind information of the document as electronic data (*col. 7, lines 37-40, col. 12, lines 20-23, col. 12, lines 24-25, the stylus input subsystem 110 is implemented by a stylus, a pen controller 110A and a digitizer panel 110B, the pen controller 110A controls the digitizer panel 110B and provides positional information of pen or stylus contact such that the positional information of pen is included in "pen event", which is to be transmitted over wireless link as shown in Fig. 7 [note that the transmission of "pen event" in the network is transmission of electronic data], col. 79, lines 29-33, and as shown in Fig. 110, a local handwriting recognition system which includes determining whether the system is in a handwriting recognition mode, if so, the system calls the handwriting recognizer in step 2328 [note that prior to performing handwriting recognition, the system has to encounter or specify a document from which hand writing recognition is to be performed]*) by means of an electronic pen (*STYLUS (110)*), processing said electronic data (*Fig. 2 (101) (col. 11, lines 52-54, after receiving positions of*

Art Unit: 2629

the stylus in stylus input subsystem 110, the host computer 101 generates display commands, note that the host computer has to process the received position data before generating display commands) to be utilizable in a system(Fig. 2(108))disposed at a latter stage and delivering it to said system at the latter stage (col. 6, lines 5-7, FIG. 2 illustrates a communication between the wireless interface device 100 and a wired LAN 114, which includes a server 108, note due to network connection, the server (108) in the network 114 can be used after the host computer (101) processes the received data from the interface device (100)), comprising: said electronic pen interfacing with document identifying indicia of said document , said document identifying indicia dictating data entry layout areas of said document, where said information is written (col. 26, lines 50-53, input activities are detected alternatively by the pen controller 110A, or by keyboard controller 125, col. 8, lines 65-67, such that the keyboard controller 125 also supports a PS/2-type bar code reader, note that positional information with respect to the digitizer panel has to have specific information with respect to the panel as well. In addition, when a bar code reader is used, reading a bar code is functionally equivalent to specifying a material over which the code is printed) a) causing an electronic pen terminal device to obtain the electronic data including said information written to said data entry layout areas from said electronic pen (col. 6, lines 38-46, the wireless interface device 100 includes a Viewer Manager software 200 (FIG. 6) the performance of which includes collecting input positional

Art Unit: 2629

information from a stylus input subsystem 110), note as mentioned above, alternate input activities include keyboard controller (125) with a bar code reader)); b) causing said terminal device to transmit said electronic data to said document taking-over apparatus(col. 6, lines 38-46, the wireless interface device 100 includes a Viewer Manager software 200 (FIG. 6) the performance of which includes transmitting input positional information from a stylus input subsystem 110 to the host computer 101);

Bi teaches as shown in Fig. 1, the remote host computer 101 is provided with a transceiver 115 for communication with a transceiver 116 in the wireless interface device 100 (col. 5, lines 55-57), note that for the remote host computer 101 to receive the data from the wireless interface (100), there has to be compatibility in formats of the two systems (100, 101) and compatibility in format is achieved by an appropriate conversion of one format into another. Bi teaches as shown in Fig. 46, software structure of network system which enables the wireless interface device including a host computer (101) as shown in Fig. 46 in which communication from the host computer (101) to both the wired LAN card (1352) and the wireless LAN card is formatted by the IPXODI.COM (1355) and multiplexed to either the wireless LAN card 1360 or wired LAN card 1352 by the multiplexer IPXMUX.COM (1364). Note that FIG. 2 illustrates communication between

the wireless interface device 100 and a wired LAN 114 including the host (101) and the server (108), and due to networking (114), the host computer (101) which receives information on the position of the stylus could share the information by transmitting it to the server (108).

Bi does not specifically teach c) “causing said document taking-over apparatus to convert said electronic data into document information of said predetermined format on the basis of format information which defines specifications for converting said electronic data stored in memory means of said document taking-over apparatus into said predetermined format and registering it in memory means of said document talking-over apparatus”, and “a step of causing said document-taking over apparatus to transmit said document information to said system at the latter stage when said document information is registered in said memory means of said document taking-over apparatus in the step c)”.

Geoghegan on the other hand illustrates a computer (12), with a conversion system (36) shown in Fig. 1, a knowledge object (40), which is any electronic representation of information (such as an electronic file that storing a word processing document, a web page, a spreadsheet, a presentation, an e-mail, a chart, an image, an audio file, a video, etc.) as shown in Fig. 2 (col. 6, lines 14-18), custom system 32 which includes the conversion system 36 to receive the knowledge object 40 and convert the knowledge object 40 into a set of knowledge atoms 44, each knowledge

atom 44 representing an elementary piece of information that was contained in knowledge object 40.(col. 6, lines 19-23), and then the knowledge atoms 44 that represent a knowledge object 40 are stored in a tree structure. For example, custom system 32 can convert each knowledge object 40 into a tree structure stored in extensible markup language (XML)(see fig. 4 (S1, S2col. 6, lines 38-44). Geoghegan teaches the custom system 32 accepts one or more knowledge objects 40 and produces one or more custom learning objects 42, such that learning objects 42 can be addressed to a user (26) who can communicate in a network (col. 4, lines 65-67col. col. 5, lines 1-13, 6, lines 7-10, col. 9, lines 33-35).

Note that as shown in Fig. 1, Geoghegan illustrates the conversion circuit (36), which is already inside a memory (16) the computer (12).

*It would have been obvious to one of ordinary skill in the art the time the invention was made to combine Bi's network-based remote host computer (101) shown in Fig. 2 with Geoghegan's conversion system 36 inside a computer (12) **as shown in Fig. 1 (the conversion system receiving electronic information, processing it and storing it in XML format, and the computer producing (42) to a user (26) in a network)**, because the use of a conversion system (36) inside a computer*

(12) allows translation of electronic document into custom learning objects enabling training that can be provided over a computer network as taught by Geoghegan (col. 1, lines 17-21).

Regarding claim 14, Bi as modified by Geoghegan teaches a step of causing said system at the latter stage (*Fig. 2 (108)*) to transmit request information for requesting transmission of said document information to said document taking-over apparatus (*Fig. 1(108)*) (*col. 6, lines 5-7, col. 11, lines 53-54* *FIG. 2 illustrates a communication between the wireless interface device 100 and a wired LAN 114, which includes a server 108*)), *note local area networking (LAN), in this case LAN (114) is a communication network that links computers and remote automation units that perform various tasks, hence it apparent a server (108) in a LAN (114) shown in Fig.2, based on the very idea of networking is capable of communicating with respect functions the interface device 100 whose function includes delivering the positions of the stylus information to the host computer (101)*); and causing said document taking-over apparatus to transmit said document information to said system at the latter stage (*FIG. 2 illustrates the communication between the wireless interface device 100 and a wired LAN 114 including the host (101) and the server (108), due to networking (114), it is apparent that the host computer (101) which receives information on*

the position of the stylus could share the information by transmitting it to the server (108).

Regarding claim 17, Bi teaches a document taking-over apparatus comprising an electronic pen terminal means for interfacing with document identifying indicia of a document, said document identifying indicia dictating data entry layout areas of said document, where information is hand written (*Fig. 2 (100, 101, 108, 109, 114), col. 26, lines 50-53, input activities are detected alternatively by the pen controller 110A, or by keyboard controller 125, col. 8, lines 65-67, such that the keyboard controller 125 also supports a PS/2-type bar code reader, note that positional information with respect to the digitizer panel has to have specific information with respect to the panel as well. In addition, when a bar code reader is used, reading a bar code is functionally equivalent to specifying a material over which the code is printed*): means for receiving data concerning said document as electronic data including said information written to said data entry layouts areas (*FIG. 2 illustrates a host (101) including a transceiver 115, the host (101) receiving positional information of pen which is included in "pen event", the "pen event" is to be transmitted over wireless link [note that the transmission of "pen event" in the network is transmission of electronic data], note as mentioned above, alternate input activities include keyboard controller (125) with a bar code reader*)) a memory means (*wired and wireless*

LAN card, See Fig. 44 (1354)) for storing format information which defines specifications for converting the received electronic data into a predetermined format; (col. 47, lines 52-56, as shown in Fig. 46, communication with a host computer (101) runs a wired LAN card 1352 and a wireless LAN card such that formatting is to be done by IPXODI.COM (1364), note that prior to formatting from one version to another, there has to be specifications and other necessary information allowing one format to be converted into another format));

Bi teaches as shown in Fig. 1, the remote host computer 101 is provided with a transceiver 115 for communication with a transceiver 116 in the wireless interface device 100 (col. 5, lines 55-57), note that for the remote host computer 101 to receive the data from the wireless interface (100), there has to be compatibility in formats of the two systems (100, 101) and compatibility in format is achieved by an appropriate conversion of one format into another. Bi teaches as shown in Fig. 46, software structure of network system which enables the wireless interface device including a host computer (101) as shown in Fig. 46 in which communication from the host computer (101) to both the wired LAN card (1352) and the wireless LAN card is formatted by the IPXODI.COM (1355) and multiplexed to either

Art Unit: 2629

the wireless LAN card 1360 or wired LAN card 1352 by the multiplexer IPXMUX.COM (1364).

Bi does not specifically teach document information preparation means for preparing document information of the predetermined format by using the electronic data and the format information; registration means for registering the document information prepared by the document information preparation means and transmission means for transmitting the document information registered in the registration means.

Geoghegan on the other hand illustrates a computer (12), with a conversion system (36) shown in Fig. 1, knowledge object (40) and learning object (42) which are any electronic representation of information (such as an electronic file that storing a word processing document, a web page, a spreadsheet, a presentation, an e-mail, a chart, an image, an audio file, a video, etc.) as shown in Fig. 2 (col. 6, lines 14-18), custom system 32 which includes the conversion system 36 to receive the knowledge object 40 and convert the knowledge object 40 into a set of knowledge atoms 44, each knowledge atom 44 representing an elementary piece of information that was contained in knowledge object 40.(col. 6, lines 19-23), and then the knowledge atoms 44 that represent a knowledge object 40 are stored in a tree structure. For example, custom system 32 can convert each knowledge

object 40 into a tree structure stored in extensible markup language (XML)(see fig. 4 (S1, S2), col. 6, lines 38-44). Geoghegan teaches the custom system 32 accepts one or more knowledge objects 40 and produces one or more custom learning objects 42, such that learning objects 42 can be addressed to a user (26) who can communicate in a network (col. 4, lines 65-67col. col. 5, lines 1-13, 6, lines 7-10, col. 9, lines 33-35).

*It would have been obvious to one of ordinary skill in the art the time the invention was made to combine Bi's network-based remote host computer (101) shown in Fig. 2 with Geoghegan's conversion system 36 inside a computer (12) **as shown in Fig. 1 (the conversion system receiving electronic information, processing it and storing it in XML format, and the computer producing (42) to a user (26) in a network)**, because the use of a conversion system (36) inside a computer (12) allows translation of electronic document into custom learning objects enabling training that can be provided over a computer network as taught by Geoghegan (col. 1, lines 17-21).*

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bi et al (USPN 7113173) in view of Geoghegan (USPN 7165054) and Chantrain et al. (USPN 6944664).

Regarding claim 4, Bi teaches a document taking-over system (*as best understood, Fig. 2 (100, 101, 108, 109, 114)*) including a terminal device (*col. 5, lines 46-47, Fig. 1 (100)*) provided with an electronic pen (*col. 6, lines 40-41, Fig. 1 (110)*) which gets information written by hand on a document prepared to be able to specify a kind thereof together with kind information of said document as electronic data (*col. 7, lines 37-40, col. 12, lines 20-23, col. 12, lines 24-25, the stylus input subsystem 110 is implemented by a stylus, a pen controller 110A and a digitizer panel 110B, the pen controller 110A controls the digitizer panel 110B and provides positional information of pen or stylus contact such that the positional information of pen is included in "pen event", which is to be transmitted over wireless link as shown in Fig. 7 [note that the transmission of "pen event" in the network is transmission of electronic data], col. 79, lines 29-33, and as shown in Fig. 110, a local handwriting recognition system which includes determining whether the system is in a handwriting recognition mode, if so, the system calls the handwriting recognizer in step 2328 [note that prior to performing handwriting recognition, the system has to encounter or specify a document from which hand writing recognition is to be performed]) a document taking-over apparatus(*Fig. 2 (101)*) for processing said electronic data to produce it as document information (*col. 11, lines 52-54, after receiving positions of the stylus in stylus input subsystem 110, the host computer 101, generates display commands, note that the host computer has to process the received**

position data before generating display commands) and a system (Fig. 2(108)), and a system (Fig. 2(108)) disposed at a latter stage to utilize said document information, which are connected to one another through a network (col. 6, lines 5-7, FIG. 2 illustrates a communication between the wireless interface device 100 and a wired LAN 114, which includes a server 108, note that due to network connection, the server (108) in the network 114 can be used after the host computer (101) processes the received data from the interface device (100)); said electronic pen terminal device is adapted to interface with document identifying indicia of said document, said document identifying indicia dictating data entry layout areas of said document, where said information is written (col. 26, lines 50-53, input activities are detected alternatively by the pen controller 110A, or by keyboard controller 125, col. 8, lines 65-67, such that the keyboard controller 125 also supports a PS/2-type bar code reader, note that positional information with respect to the digitizer panel has to have specific information with respect to the panel as well. In addition, when a bar code reader is used, reading a bar code is functionally equivalent to specifying a material over which the code is printed) said document taking-over apparatus (Fig. 1(101)) comprising: second communication means (Fig. 1 (115), Fig. 2 (114)) for receiving said electronic data including said information written to said data entry layout areas from said terminal device (Fig. 1 (100), note as mentioned above, alternate input activities include keyboard controller (125) with a bar code reader)) through said network (Fig. 2

Art Unit: 2629

(114)) and transmitting said document information to said system at the latter stage (Fig. 2 (108))(col. 11, lines 49-54, the host computer 101 receives position of the stylus from the wire less interface device (100), col. 5, lines 55-57, as shown in Fig. 1, the remote host computer 101 is provided with a transceiver 115 for communication with a transceiver 116 in the wireless interface device 100, as shown in Fig. 2, the transceiver 116 in the wireless interface device 100 communicates with an access point 109 by way of a transceiver (not shown), which interfaces the wireless interface device 100 with a wired LAN 114 which includes a server 108, note that elements (100, 101) are the same for both Fig. 1 and Fig. 2); second memory means (wired and wireless LAN card, See Fig. 44 (1354)) for storing format information which defines specifications for converting said electronic data into a predetermined format (col. 47, lines 52-56, as shown in Fig. 46, communication with a host computer (101) runs a wired LAN card 1352 and a wireless LAN card such that formatting is to be done by IPXODI.COM (1364), note that prior to formatting from one version to another, there has to be specifications and other necessary information allowing one format to be converted into another format) utilizable in the system at the latter stage (FIG. 2 illustrates the communication between the wireless interface device 100 and a wired LAN 114, which includes a server 108);

Bi teaches as shown in Fig. 1, the remote host computer 101 is provided with a transceiver 115 for communication with a transceiver 116 in the wireless interface device 100 (col. 5, lines 55-57), note that for the remote host computer 101 to receive the data from the wireless interface (100), there has to be compatibility in formats of the two systems (100, 101) and compatibility in format is achieved by an appropriate conversion of one format into another. Bi teaches as shown in Fig. 46, software structure of network system which enables the wireless interface device including a host computer (101) as shown in Fig. 46 in which communication from the host computer (101) to both the wired LAN card (1352) and the wireless LAN card is formatted by the IPXODI.COM (1355) and multiplexed to either the wireless LAN card 1360 or wired LAN card 1352 by the multiplexer IPXMUX.COM (1364).

Bi does not specifically teach preparation means for preparing said document information of said predetermined format on the basis of said electronic data and said format information; and registration means for registering said document information in said memory means and transmitting said document information to said system at the latter stage by means of said second communication means

Geoghegan on the other hand illustrates a computer (12), with a conversion system (36) shown in Fig. 1, a knowledge object (40), which is

Art Unit: 2629

any electronic representation of information (such as an electronic file that storing a word processing document, a web page, a spreadsheet, a presentation, an e-mail, a chart, an image, an audio file, a video, etc.) as shown in Fig. 2 (col. 6, lines 14-18), custom system 32 which includes the conversion system 36 to receive the knowledge object 40 and convert the knowledge object 40 into a set of knowledge atoms 44, each knowledge atom 44 representing an elementary piece of information that was contained in knowledge object 40.(col. 6, lines 19-23), and then the knowledge atoms 44 that represent a knowledge object 40 are stored in a tree structure. For example, custom system 32 can convert each knowledge object 40 into a tree structure stored in extensible markup language (XML)(see fig. 4 (S1, S2col. 6, lines 38-44). Geoghegan teaches the custom system 32 accepts one or more knowledge objects 40 and produces one or more custom learning objects 42, such that learning objects 42 can be addressed to a user (26) who can communicate in a network (col. 4, lines 65-67col. col. 5, lines 1-13, 6, lines 7-10, col. 9, lines 33-35).

*It would have been obvious to one of ordinary skill in the art the time the invention was made to combine Bi's network-based remote host computer (101) shown in Fig. 2 with Geoghegan's conversion system 36 inside a computer (12) **as shown in Fig. 1 (the conversion system***

receiving electronic information, processing it and storing it in XML format, and the computer producing (42) to a user (26) in a network), because the use of a conversion system (36) inside a computer (12) allows translation of electronic document into custom learning objects enabling training that can be provided over a computer network as taught by Geoghegan (col. 1, lines 17-21).

Bi teaches as shown in FIG. 2 a host computer 101 and wireless interface device 100 along with communication between the wireless interface device 100 and a wired LAN 114, which includes a server 108. Bi teaches a transceiver 116 in the wireless interface device 100 communicates with an access point 109 by way of a transceiver (not shown), which interfaces the wireless interface device 100 with a wired LAN 114 which includes a server 108. Bi teaches as an alternative, the wireless interface device 100 can be used in a wireless network in a Windows for Workgroups or Personal Netware environment (col. 6, lines 3-15).

Bi does not specifically teach a correspondence retrieval apparatus for transmitting connection information to said document taking-over apparatus to said terminal device such that “said correspondence retrieval apparatus comprises first memory means for storing at least correspondence information for causing said kind information of said document to correspond to

Art Unit: 2629

said connection information to said document taking-over apparatus, first communication means for communicating with said terminal device through said network; and retrieval means for searching, when said kind information of said document is received from said terminal device, said correspondence information for said connection information to said document taking-over apparatus corresponding to said kind information of said document to transmit said connection information to said terminal device.

*Chantrain et al. (USPN 6944664) on the other hand teaches as shown in Fig. 1 two user terminals (UT1, UT2), access nodes, such as server (NAS1), and data server (SDS) all connected in a network, Chantrain et al. further teaches a connection establishment request reception means CERRM2 (which is inside NAS1) that is adapted to **receive a connection request from the second user-terminal (UT2) to establish a connection between the second user-terminal (UT2) and the first user terminal (UT1) such that connection information searching means RISM (which is inside SDS) retrieves the connection information of the second user terminal (UT2), and the information is sent to the second user terminal (UT2) through sending means CERSMI (which is also inside SDS) (col. 3, lines 17-20, col. 4, lines 57-58, col. 4, lines 4-14, col. 6, lines 42-55, Fig.1 (UT1, UT2, NAS1, SDS), Fig. Fig. 2 (CERRM2), Fig. 3 (RISM, CERSM1)).***

Note that the connection information searching means RISM, which is inside the data server (SDS) performs the searching from a database (DB) as shown in Fig. 3 (col. 6, lines, 20-24).

*It would have been obvious to one of ordinary skill in the art the time the invention was made to combine Bi's networking (114) arrangement (including host (101) and server (108)) as shown in Fig. 2 with Chantrain's data server (SDS) along with access server (NAS1) as configured in Fig. 1 **(access server (NAS1) and the data server (SDS) receiving a connection request, retrieving the connection information and sending the connection information)**, because the use of access server (NAS1) along with a data server (SDS) helps connect user terminal (UT1, UT2) in network environment as taught by Chantrain (col. 1, lines 8-13, col. 3, lines 5-10).*

Allowable Subject Matter

6. Claims 1, 3, 5-12 and 16 are allowed.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2629

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulsalam whose telephone number is 571-272-7685. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2629

Abbas I Abdulsalam
Examiner
Art Unit 2629
October 6, 2007

A handwritten signature in black ink, appearing to read 'Richard Hjerpe', with a stylized, cursive script.

RICHARD HJERPE
REGISTERED PATENT EXAMINER
10/6/2007